Project Narrative - Indian School Road, Drinkwater Blvd to Pima Rd.

Existing Conditions

The existing Indian School Road (ISR) is a five-lane roadway including a two-way center left-turn lane with no bike lanes. Roadway features include curbs, gutters, and sidewalks that are damaged and cracked in many locations. Several styles of street lighting occur along the project area and no pedestrian lighting is present. Current traffic counts show that ISR carries 39,496 vehicles per day is this area.

Project Scope

The proposed project will serve as a gateway for motorists entering downtown Scottsdale from the Pima Freeway/Loop 101. The City of Scottsdale would like to provide a pedestrian and bike friendly corridor along Indian School Road to allow for better access to major paths including Pima Path and Indian Bend Wash. A public participation program is currently underway to determine the needs and wants of the City of Scottsdale (City) and public. Throughout the design and construction it is anticipated that additional public meetings, open houses, and group-specific meetings will be required to make this a successful project. The public has voiced concerns of traffic volumes, speeds, and noise. With aesthetics in mind, the residents have expressed a desire for a "green desert" roadway with many trees and plantings along the roadway. The public would like the public art to reflect the timelessness of Indian School Road and it's many different areas to be reflected in this single corridor from downtown businesses, to Indian Bend Wash, to residential apartments/condominiums, and historic homes.

Many improvements are necessary along this corridor. Though traffic volume dictates three lanes in each direction for streets with over 35,000 vehicles per day, the Scottsdale City Council made a decision in the late 1990's to keep ISR two lanes in each direction to avoid major right-of-way and streetscape character changes throughout the corridor. The two major improvements the new design will seek to accomplish are to reduce the impact of traffic volumes for the community and to reduce the travel speed and noise of the vehicles on ISR. This project will address these improvements by providing adequate traffic calming through the use of landscape improvements, lane narrowing, raised medians, slight meanderings in the roadway centerline, and rubberized asphalt for noise reduction. Improvements focused on alleviating increased traffic volumes include signal progression, raised medians to reduce left-turn movements, and additional right-turn lanes at intersections.

The roadway improvements will begin at the east half of the intersection of ISR at Drinkwater Boulevard and end approximately 350 feet west of the intersection of Pima Road at ISR. The project will end just west of Pima Road due to planned improvements scheduled for Pima Road. This project will not include the intersection of Hayden Road because of recently implemented streetscape and channel improvements associated with a previously completed Capital Improvement Project at that location.

Design Improvements

This project will construct a four-lane cross-section with two lanes in each direction including landscaping, monumentation, arts elements, pedestrian features, raised medians, bike lanes, noise reducing pavement, traffic and pedestrian signal additions, lighting, roadway realignment, frontage road redesign, design centerline, minimal utility relocations, and drainage improvements.

Landscape and monumentation will include the introduction of a streetscape motif used to unify the various uses and character zones currently existing on ISR. The motif was developed using the public participation process to gather ideas about what the City and public wanted ISR to portray. Landscaping will introduce canopy trees in a single row to give the corridor a uniform appearance. Additional landscaping will be added in the raised medians and between the back-of-curb and sidewalk. To respond to the input received in the public participation meetings the landscape palette will include drought tolerant plants native to the southwest and lush looking in appearance that are on the Arizona Department of Water Resources (ADWR) low water use plant list.

Utilizing the motifs selected by the City and public during the public participation process the design team developed enhanced seating areas that will include benches, shade trees, paving enhancements and possibly art elements. Streetlights at the pedestrian and vehicular level will be used to reinforce the rhythm of the tree canopy. New sidewalks provide additional opportunities to incorporate the selected motifs into the streetscape and utilize some components from the art elements in the seating areas to reinforce the overall motif.

The *Art elements* will be nodes selected in conjunction with the Scottsdale Public Arts by the artists for development. The City and design team have coordinated with the artists through the initial design theming in meetings and charette workshops. These art nodes are intended to provide accent to the tree-lined streetscape with an emphasis on public gathering spaces and creating outdoor rooms. The art nodes will convey a sense of comfort using the ideas generated in the charette workshops. The art elements will be submitted separately for review by the City of Scottsdale for approval.

Pedestrian improvements will include an eight-foot sidewalk along both sides of the street and directional sidewalk ramps throughout the corridor.

Medians will vary in width from 10 feet to 12 feet. Right-of-way constraints in some locations require that at-grade two-way left turn lanes within limited areas of the corridor replace the raised medians.

Bike lanes will be 5'-6" wide lanes integrated into the street corridor to the outside of the vehicular travel lanes per the City of Scottsdale Design Standards and Policies Manual, Section 5 Transportation, Subsection 5-7 Bikeways.

As determined by a noise analysis, no new noise walls will be provided as part of this project due to the use of *rubberized asphalt* that will reduce noise levels in the future condition.

Most *traffic signals* within the street corridor will need to be relocated or replaced as part of the project improvements. *Pedestrian signals* will also be provided to meet the needs of the new directional sidewalk ramps. Pedestrian "Count-down" signals will be provided at Drinkwater Boulevard, Miller Road, Hayden Road, and Granite Reef Road. Loop detection will replace video detection at all intersections as well.

New *street lighting lamps and/or arms and pedestrian lighting* will be provided as part of this project. The new street lighting will consist of providing a single type of fixture throughout the corridor for continuity. The project team will work with APS and SRP to maintain street lighting

standards while providing a pole/head type that fits within the theme of the corridor. The pedestrian lighting will be a 12' to 14' high pole mounted fixture located between streetlights.

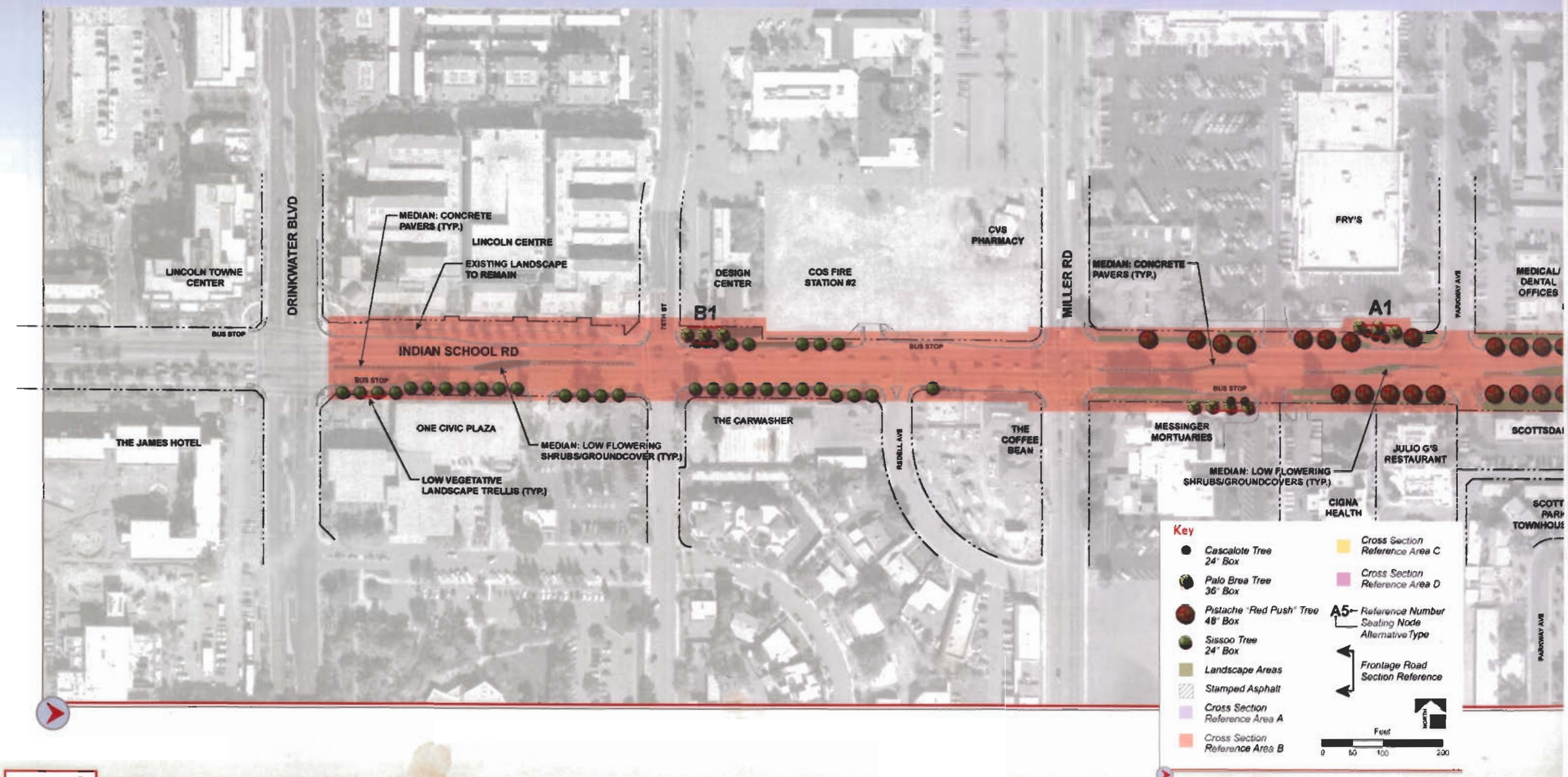
The existing survey centerline will be used as the *design centerline* for the proposed improvements. The typical section for the project may shift (north/south) to fit within the right-of-way constraints. The proposed *vertical alignment* of the project does not vary substantially from the existing condition. The vertical alignment will be designed to minimize low areas of flooding and meet drainage needs, as well as allow access to all existing crossroads and driveways with little regrading needed.

Several *frontage roads* along the project corridor will be reconstructed to improve safety and ease of access. It is recommended that these frontage road surfaces be paved with a stamped, colored asphalt in order to distinguish these frontage roads as residential or slow traffic roadways. In addition, stamped asphalt paving will also be used for pedestrian crosswalks and flush-with-grade medians. Cable barriers with landscape vines will be installed in the frontage road divider islands and at seating nodes to provide a safe pedestrian-vehicular separation. The intent of these features is to provide a sense of safety for the pedestrians and enclosure at the nodes. The City's standard bus shelter will be utilized as part of the design process. The project artist will not be involved in the design of bus shelters for the project corridor.

Utility relocations for several services will be necessary as part of the project improvements. *Drainage improvements* include extending the 72-inch storm drain from 81st Street to Pima Road. These improvements will include new catch basins as well as modifications to existing catch basins throughout the project.

This corridor is the main route of travel for most visitors driving from the Pima Freeway to downtown Scottsdale. Because of this issue, the *phasing* and traffic control for this project will be very important to the success of this project. With rising construction costs, it is anticipated the City of Scottsdale will not have the entire project monies available in fiscal year 2006, therefore it is suggested that the project be constructed in two phases. The priority for the City of Scottsdale would be to construct the improvements to the east of Indian Bend Wash to 87th Street including storm drain improvements, new curb, gutter, sidewalk, landscaping, and pavement in the first phase. The second phase would include the area west of the Indian Bend Wash to Drinkwater Boulevard and include new curb, gutter, sidewalk, landscaping, and pavement mill & overlay. The City will work closely with the contractor to determine the most effective traffic control for this high traveled area. The City of Scottsdale Intelligent Transportation System (ITS) panels will play an important part of the traffic control efforts.

Due to the traffic volumes experienced on Indian School Road year round, the City of Scottsdale would like to see this project be completed as quickly as possible. Schedule and budget are the main concerns of the City of Scottsdale; therefore the City is considering advertising the Indian School Road project as Construction Management (CM) at Risk. The City's past experience has been positive with CM at Risk including CM at Risk contractor's keeping project schedules and costs relative to project demands. At this time, it has not been determined if the Indian School Road project will be advertised as CM at Risk.



INDIAN SCHOOL ROAD (DRINKWATER BOULEVARD TO PIMA ROAD)

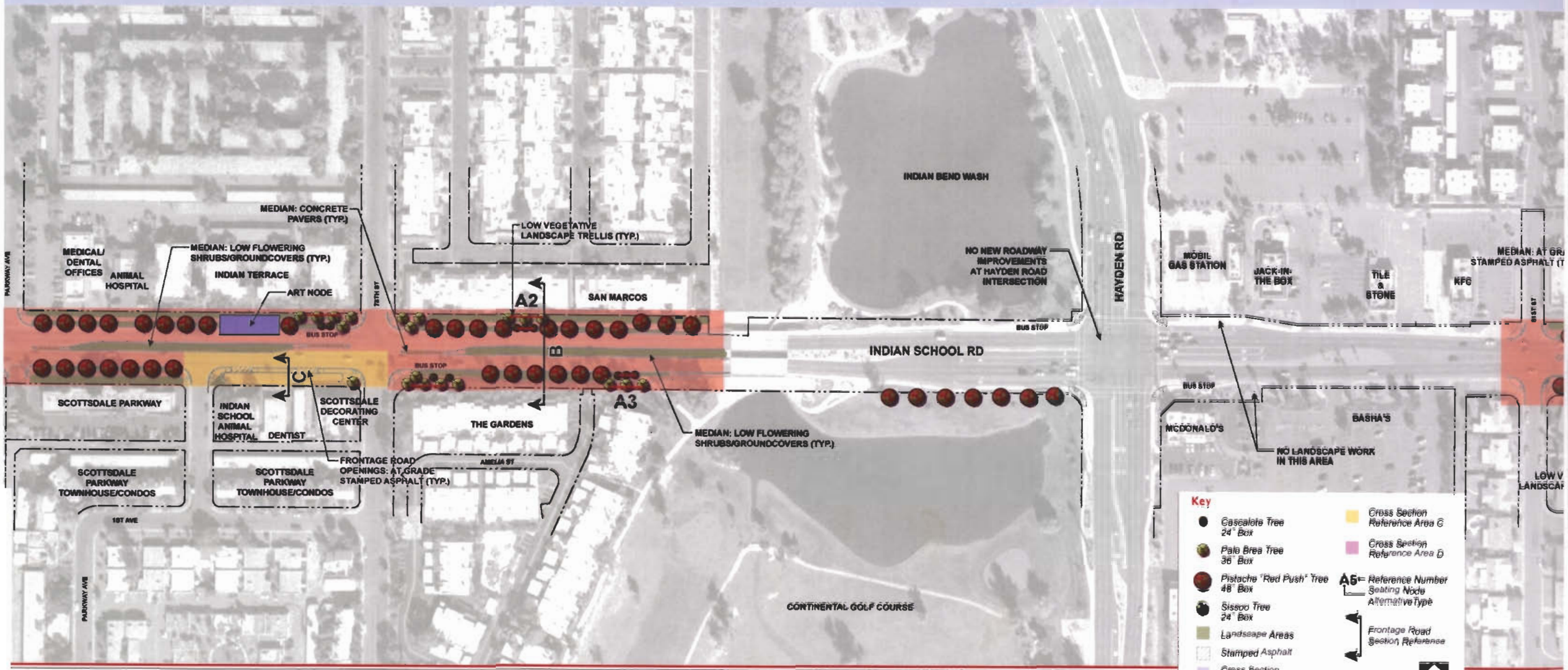
OVERALL STREETSCAPE PLAN

June 21, 2006

NOTES:

1. ALL PLANTING AREAS WILL COMPLY WITH THE REQUIREMENTS FOR SIGHT VISIBILITY TRIANGLES AS DEFINED IN THE CITY OF SCOTTSDALE DESIGN STANDARDS AND POLICIES MANUAL, SECTION 3.1, FIGURES 13 AND 14.
2. ALL TREES SHALL BE LOCATED A MINIMUM OF 8'-0" HORIZONTALLY FROM EXISTING WATER AND SEWER LINES.

18-DR-2006
REV: 6/21/2006



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June 21, 2006

18-DR-2006
REV: 6/21/2006

E DEVONSHIRE AVE

MONTERO ST

MEDIAN: AT GRADE STAMPED ASPHALT (TYP.)

LOW VEGETATIVE LANDSCAPE TRELLIS (TYP.)

FC

CIRCLE K

81ST ST

82ND ST

FRONTAGE ROAD OPENINGS: AT GRADE STAMPED ASPHALT (TYP.)

LOW VEGETATIVE LANDSCAPE TRELLIS (TYP.)

MEDIANS: LOW FLOWERING SHRUBS/GROUNDCOVERS (TYP.)

SCOTTSDALE ESTATES PHASE NINE

FRONTAGE ROAD OPENINGS: AT GRADE STAMPED ASPHALT (TYP.)

GRANITE REEF RD

FUTURE RETAIL SHOPS

MEDIAN: AT GRADE STAMPED ASPHALT (TYP.)

GRANITE REEF CENTRE

ORANGE TERRACES CO

BUS STOP

INDIAN SCHOOL RD

BUS STOP

SCOTTSDALE ESTATES PHASE FIVE

LOW VEGETATIVE LANDSCAPE TRELLIS (TYP.)

FRONTAGE ROAD OPENINGS: AT GRADE STAMPED ASPHALT (TYP.)

AMELIA AVE

SCOTTSDALE ESTATES PHASE EIGHT

83RD PL

83RD ST

MEDIAN: AT GRADE STAMPED ASPHALT (TYP.)

PARK ORLEANS

MEDIAN: CONCRETE PAVERS (TYP.)

ALLSTATE INSURANCE

BUS STOP

MEDIAN: LOW FLOWERING SHRUBS/GROUNDCOVERS (TYP.)

CITY OF SCOTTSDALE

85TH ST

Key

- Cascalote Tree 24" Box
- Palo Brea Tree 36" Box
- Pistache 'Red Push' Tree 48" Box
- Sissoo Tree 24" Box
- Landscape Areas
- Stamped Asphalt
- Cross Section Reference Area A
- Cross Section Reference Area B
- Cross Section Reference Area C
- Cross Section Reference Area D
- A5 = Reference Number, Seating Node, Alternative Type
- Frontage Road Section Reference

NORTH

Feet

0 50 100 200

NOTES:

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June 21, 2006

18-DR-2006
REV: 6/21/2006

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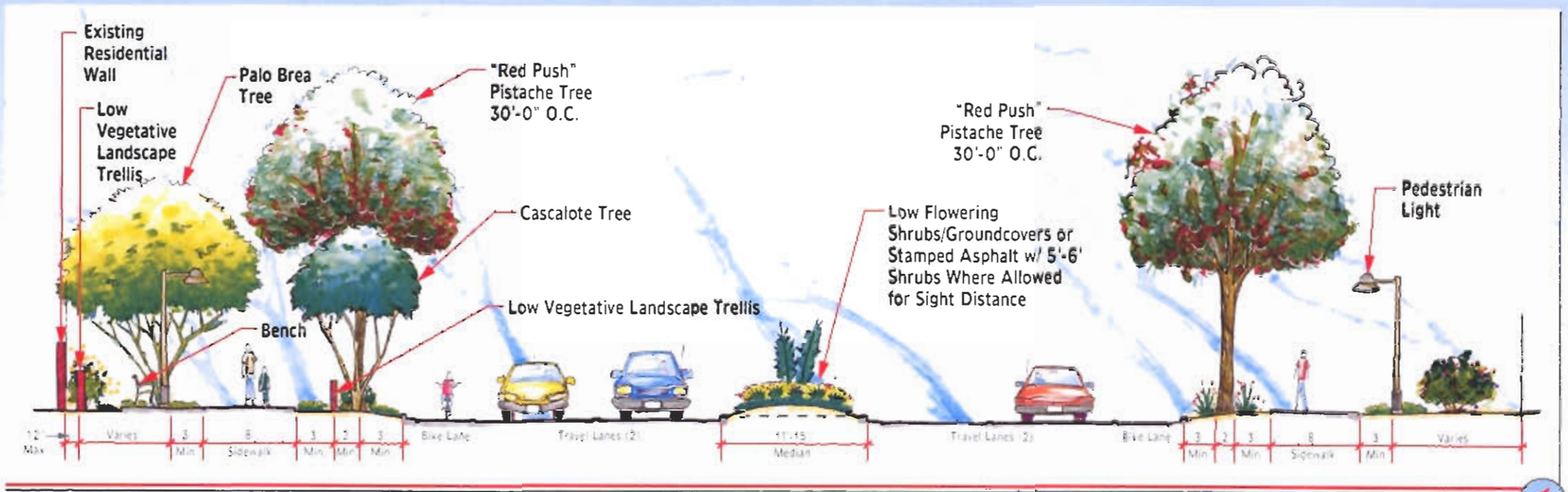
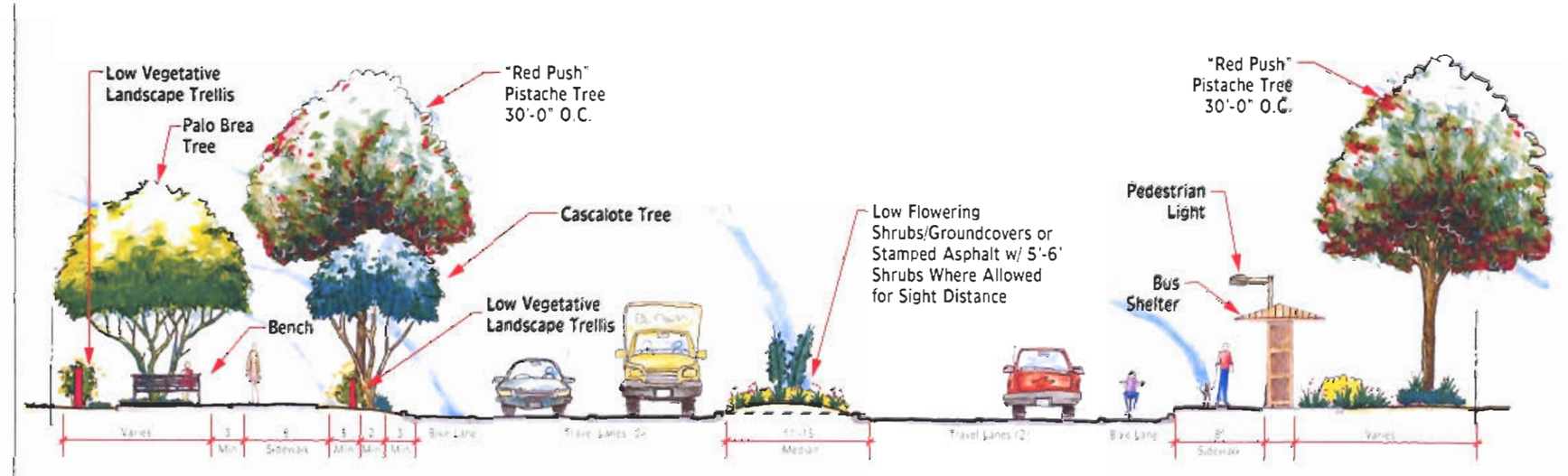
18-DR-2006
REV: 6/21/2006

June 21, 2006

LOGAN SIMPSON DESIGN INC.



Typical Cross Section A



Typical Cross Section B

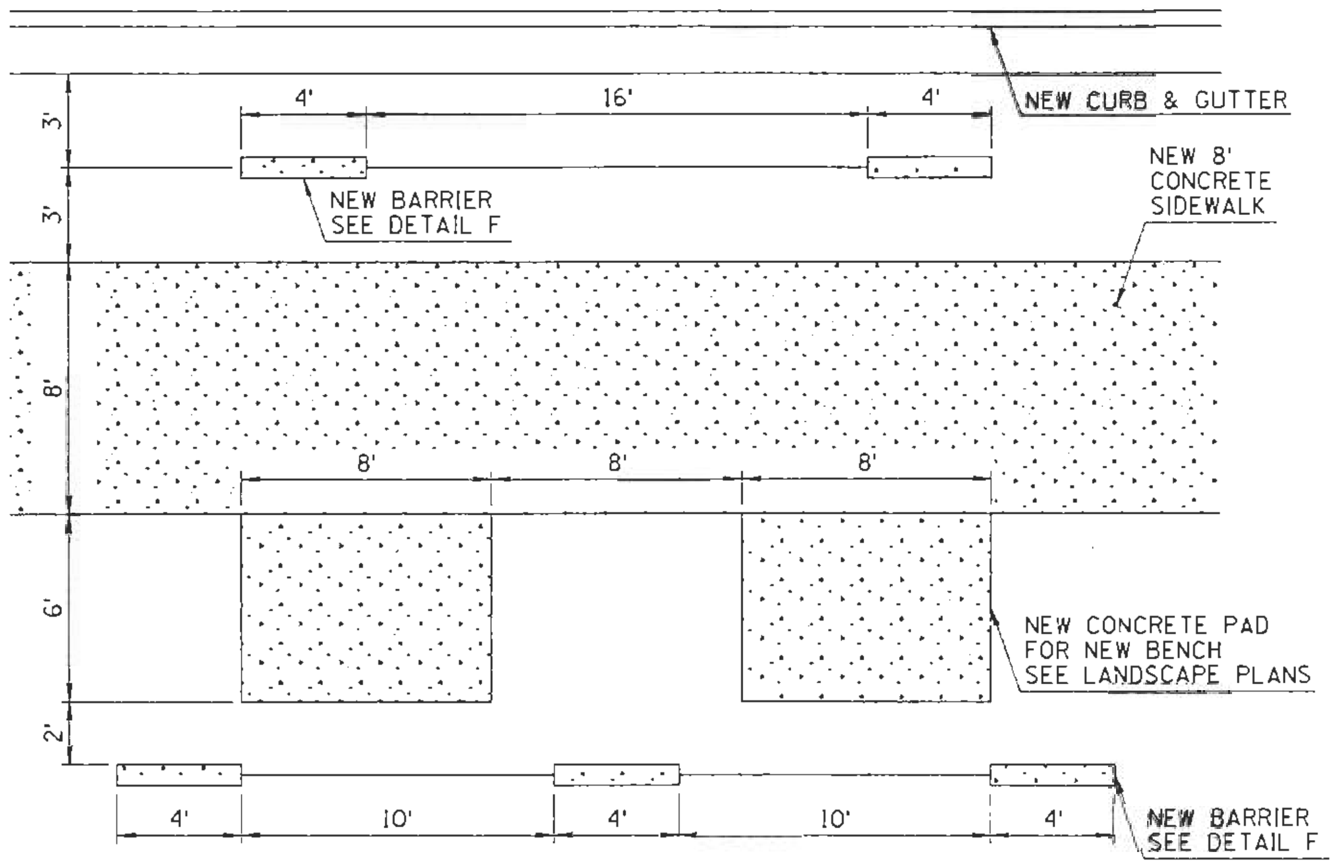
CITY OF SCOTTSDALE

INDIAN SCHOOL ROAD (DRINKWATER BOULEVARD TO PIMA ROAD)

TYPICAL STREETSCAPE CROSS SECTIONS

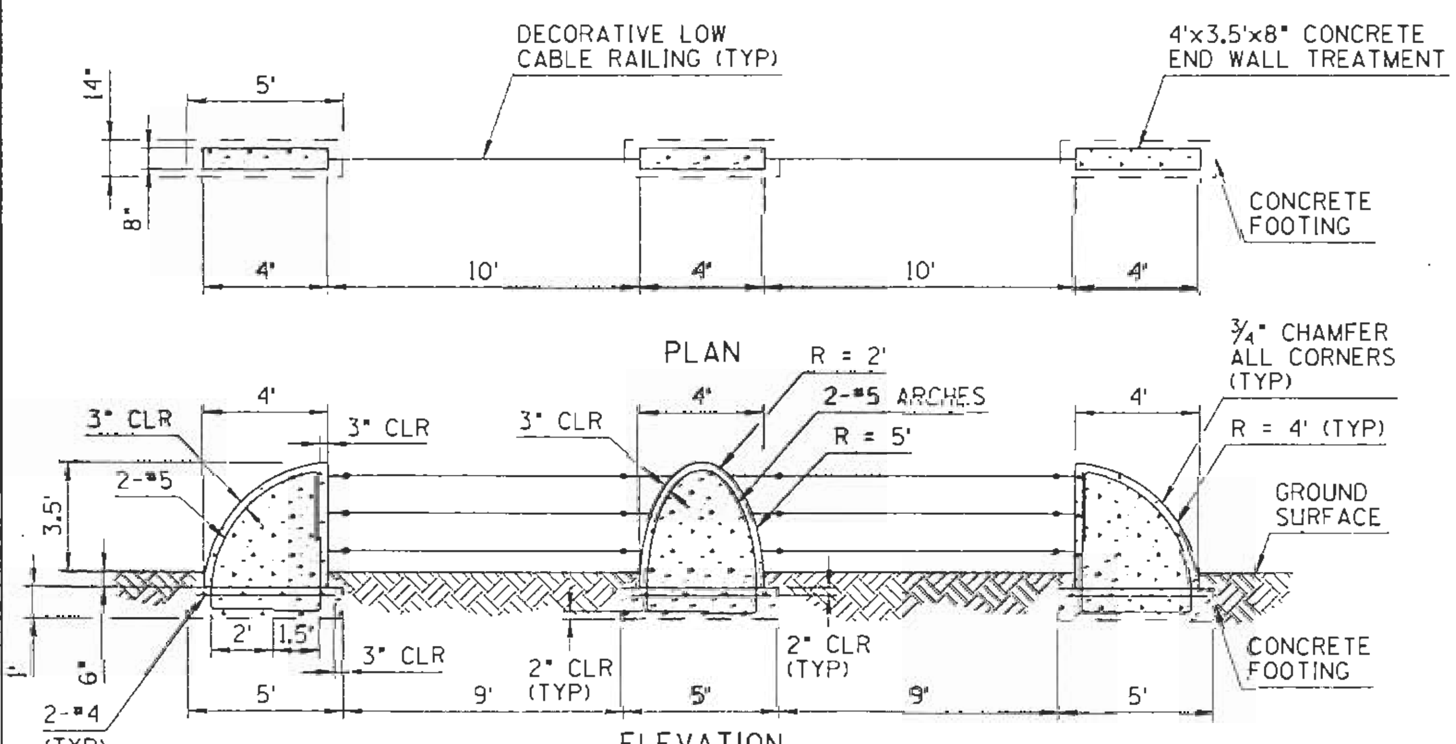
August 2006

LOGAN SIMPSON DESIGN INC.



DETAIL E

SEATING NODE

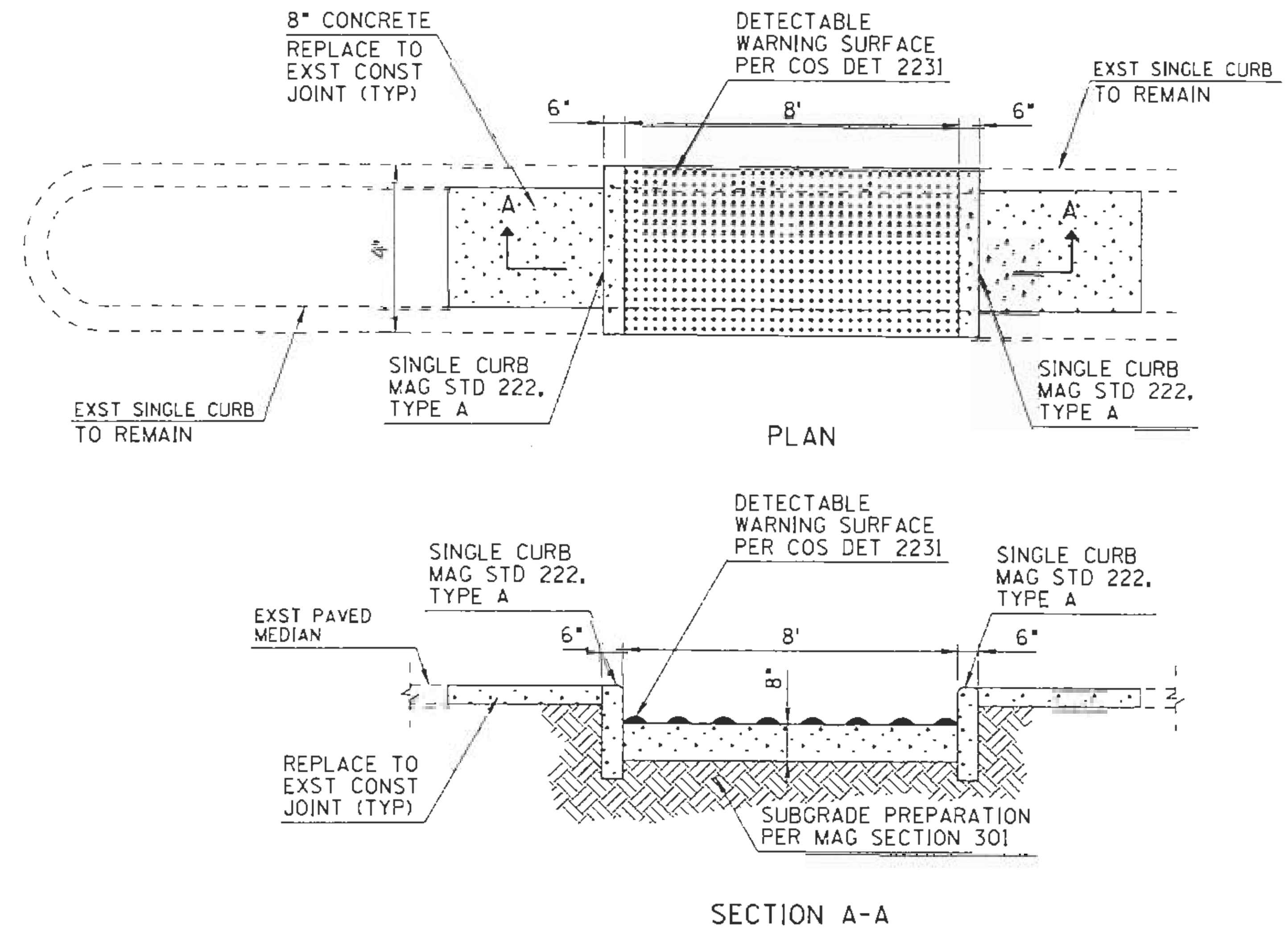


DETAIL F

CABLE BARRIER

ALL STEEL IS STAINLESS TYPE 316
OR AS DIRECTED BY THE ENGINEER.

DIBBLE & ASSOCIATES
CONSULTING ENGINEERS



DETAIL G

SIDEWALK RAMP AT MILLER ROAD

(602) 263-1100
1-800-STAKE-IT

ROADWAY DETAILS

DATE	REVISION	BY

ENGINEER: 25015 ANDREW JOHN SPEAR

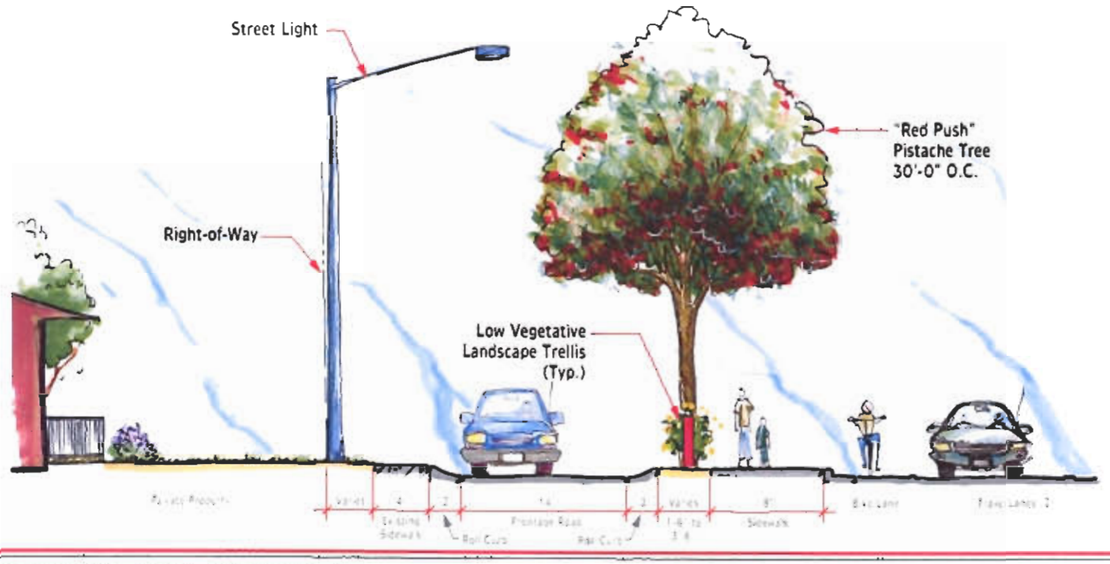
CITY OF SCOTTSDALE
MUNICIPAL SERVICES DEPARTMENT
CAPITAL PROJECT MANAGEMENT

PROJECT TITLE: INDIAN SCHOOL RD
DRINKWATER BLVD-HAYDEN RD
SEGMENT 1

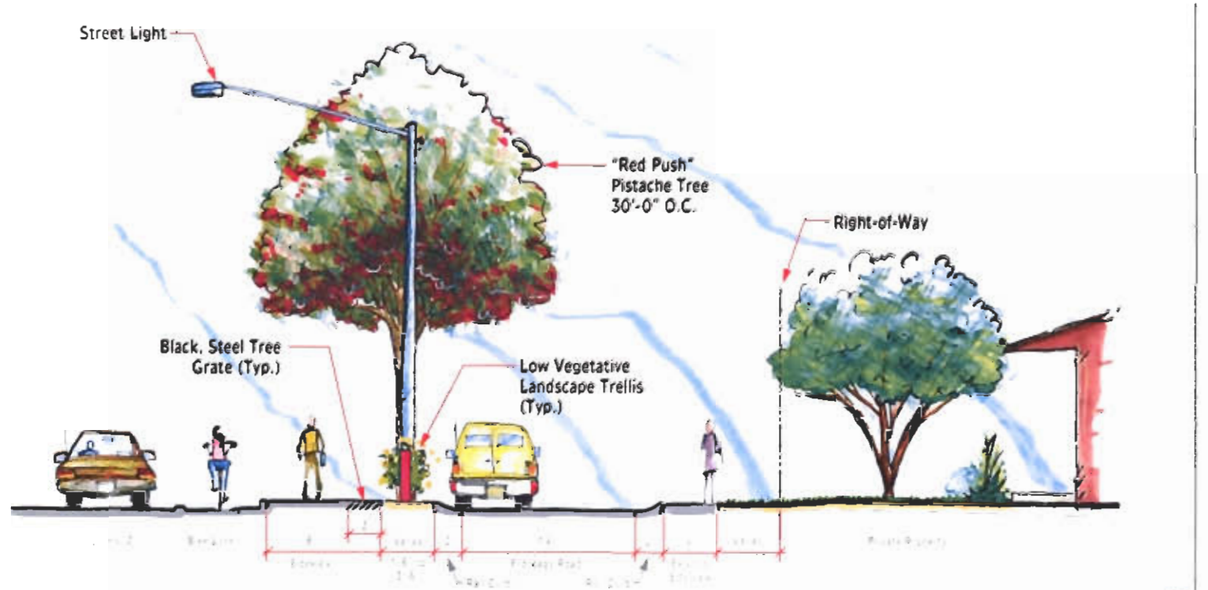
SCALE: HORIZ: VERT:	DESIGNED BY: CWF	DATE: 05-06	BID NO. 06PB123	SHT. DET2
	DRAWN BY: DLG	AS-BUILT	PROJECT NO. S0308	11 of 70

SPELL CK ___ STANDARDS CK ___ BY: ___ DATE ___

j:\2004\10-0449\ustn\DETE.dgn 5/3/2006



Frontage Road Section C
North Side (Dominguez Residence to Granite Reef Road)



Frontage Road Section D
South Side (81st Street to 82nd Street)

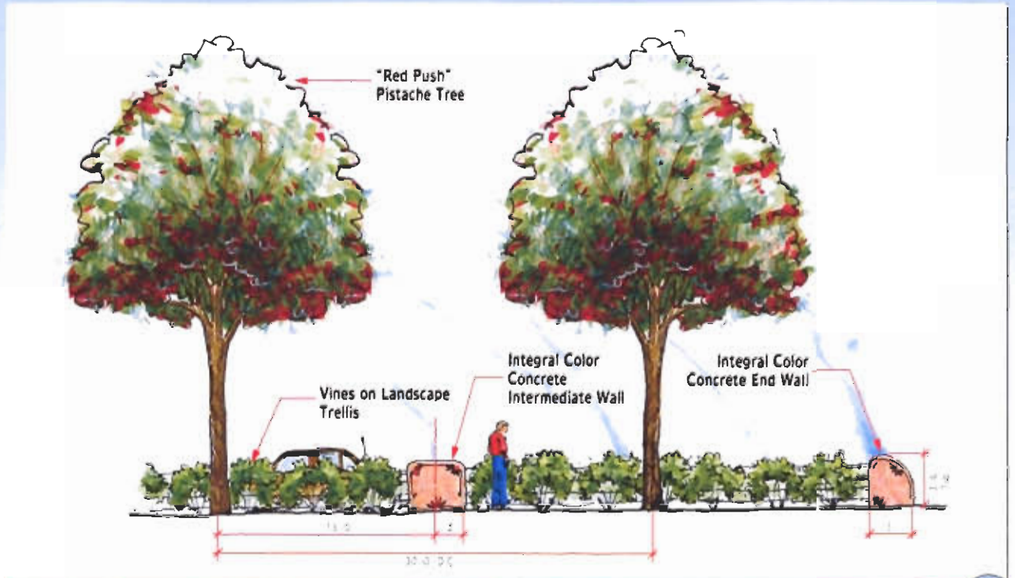
INDIAN SCHOOL ROAD (DRINKWATER BOULEVARD TO PIMA ROAD)

FRONTAGE ROAD CROSS SECTIONS

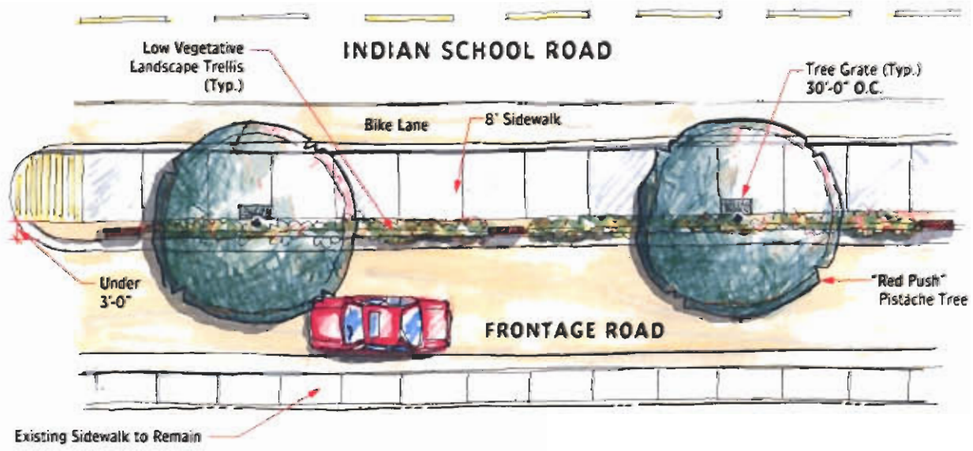
August 2006

CITY OF SCOTTSDALE.

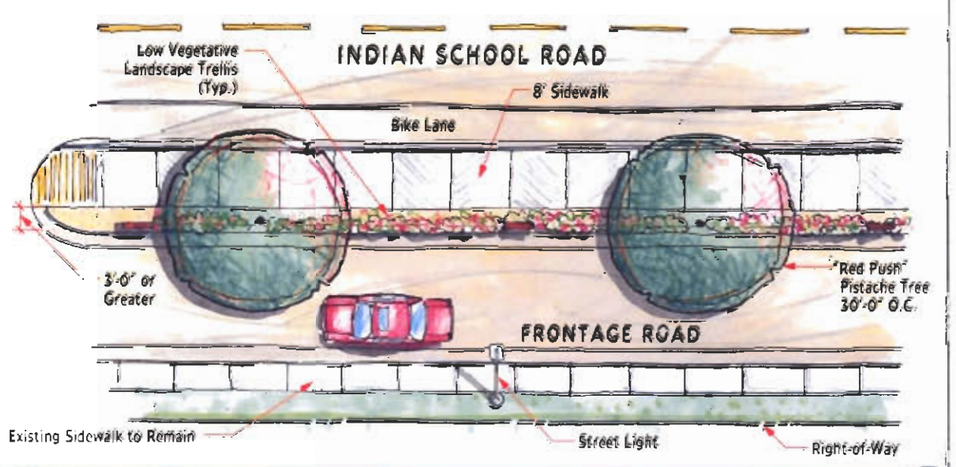
LOGAN SIMPSON DESIGN INC.



Typical Frontage Elevation



Frontage Road with Tree Grate (Plan View)
North Side (Dominguez Residence to Granite Reef Road)



Frontage Road without Tree Grate (Plan View)
South Side (81st Street to 82nd Street)

CITY OF SCOTTSDALE

INDIAN SCHOOL ROAD (DRINKWATER BOULEVARD TO PIMA ROAD)

FRONTAGE ROAD ELEVATION AND TYPICAL PLANS

August 2006

LOGAN SIMPSON DESIGN INC.

Lumec: *Domus Small Fixture 12' Height Pole*

Materials:
Poles - Steel,
Fixture - Metal Halide

Finish: *'Burgundy' RD2 Powder Coat Paint*

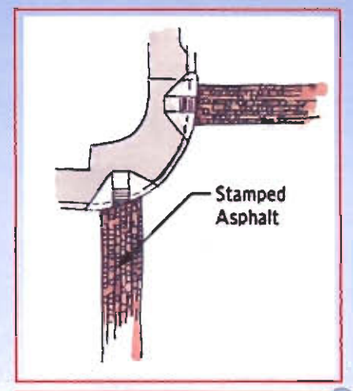
Pedestrian Light

Seating Node Trash Receptacle

Dumor: *Receptacle 158 32-Gallon*

Materials: *Steel*

Finish: *'Heritage Brown' Polyester Powder Finish 49-63040 8015*



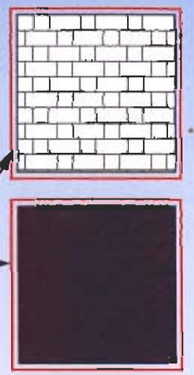
Stamped Asphalt Paving

Street Print: *Street Bond Surface System*

Materials: *Street Bond SP100 Coating*

Pattern: *Frisco Cobble*

Color: *Burnt Sienna*



Tree Grate: *48"– Half Square, ADA Compliant*

Ironsmith: *Starburst Model #M4814-1 (Half Grate)*

Material: *Steel*

Color: *Black*

Location: *81st to 82nd Street Frontage Road Only*

Half Tree Grate

Wabash Valley: *Estate Series Bench (ES420[0]) 6'-0" Length with Center Armrest*

Materials: *Cast Aluminum Bench with Rod Style Pattern*

Finish: *'Dark Bronze' Plasticol Powder Coated*

Seating Node Bench

Low Vegetative Landscape Trellis: *With Decorative End Walls (To Integrate with Artists' Pieces)*

Concrete End Walls

Color: *Mocha* **Materials:** *Integral Color Change*

Supplier: *Davis Colors*

Steel Cable Strands

Materials: *To Be Determined*

Decomposed Granite **Materials:** *Express Rose*

Size: *1/2" Screened* **Supplier:** *Granite Express, Mesa*

Decomposed Granite

Accent Paving:
Selected at Later Time (To Integrate with Artists' Pieces)

Concrete Sidewalk: *City of Scottsdale Standard*

Materials: *Mag Class B Concrete*

Finish: *Heavy Broom Finish*

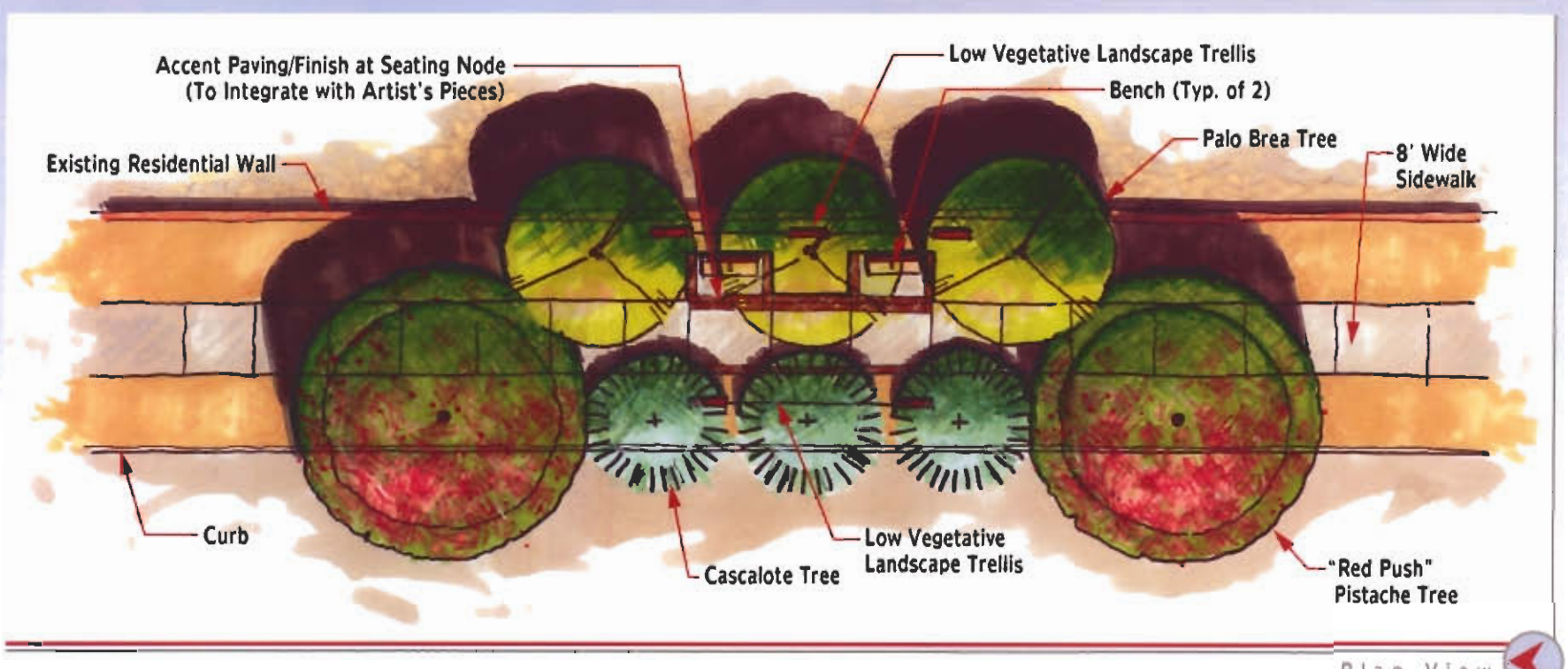
CITY OF SCOTTSDALE

INDIAN SCHOOL ROAD (DRINKWATER BOULEVARD TO PIMA ROAD)

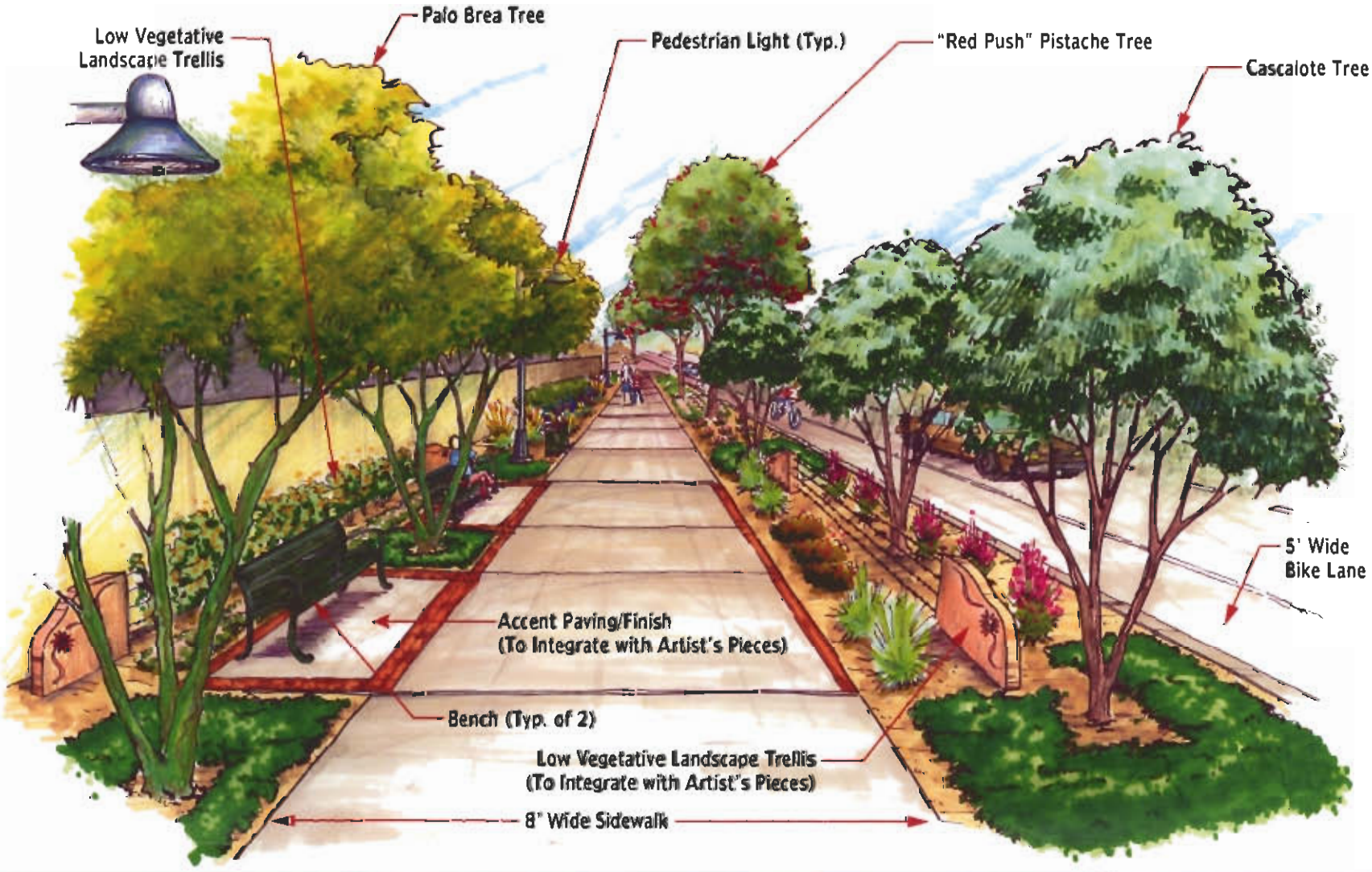
MATERIALS

August 2006

LOGAN SIMPSON DESIGN INC.



Plan View



Perspective Sketch

CITY OF SCOTTSDALE

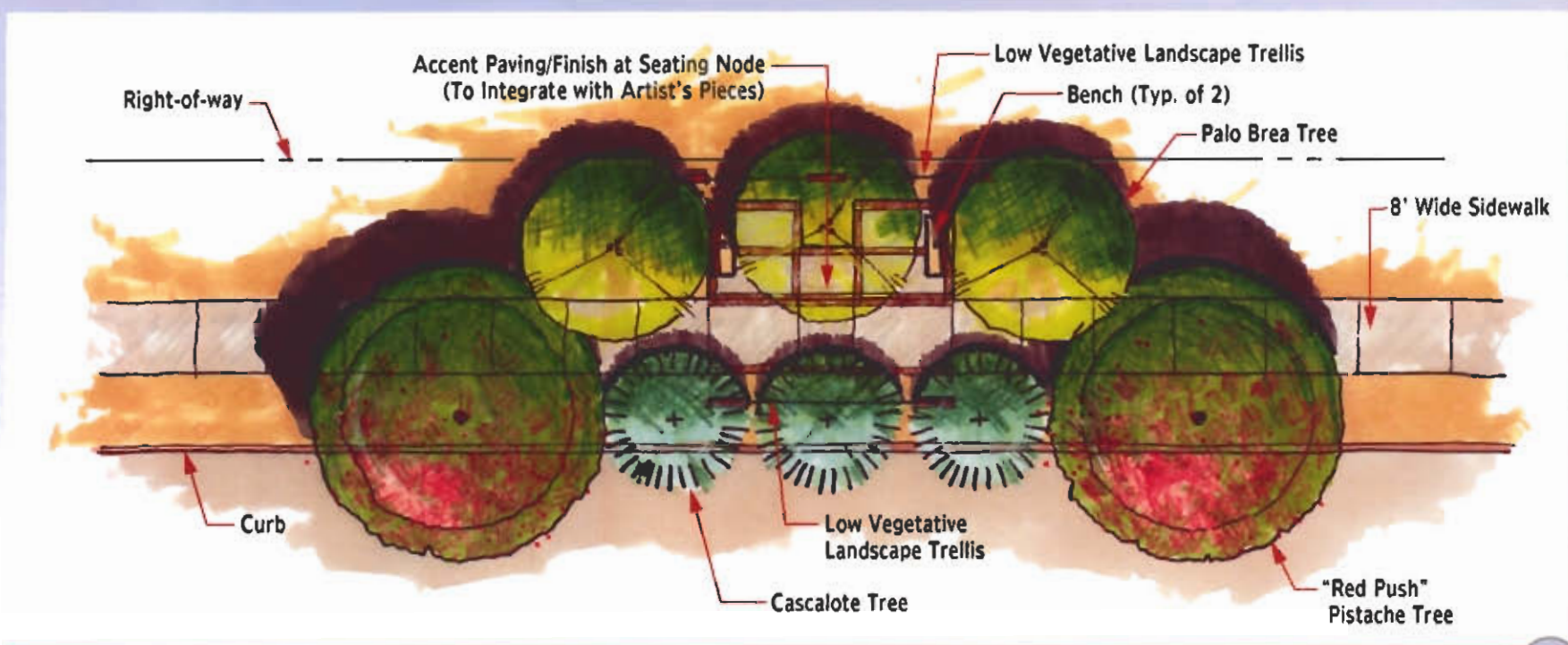
INDIAN SCHOOL ROAD (DRINKWATER BOULEVARD TO PIMA ROAD)

SEATING NODE ALTERNATIVE A

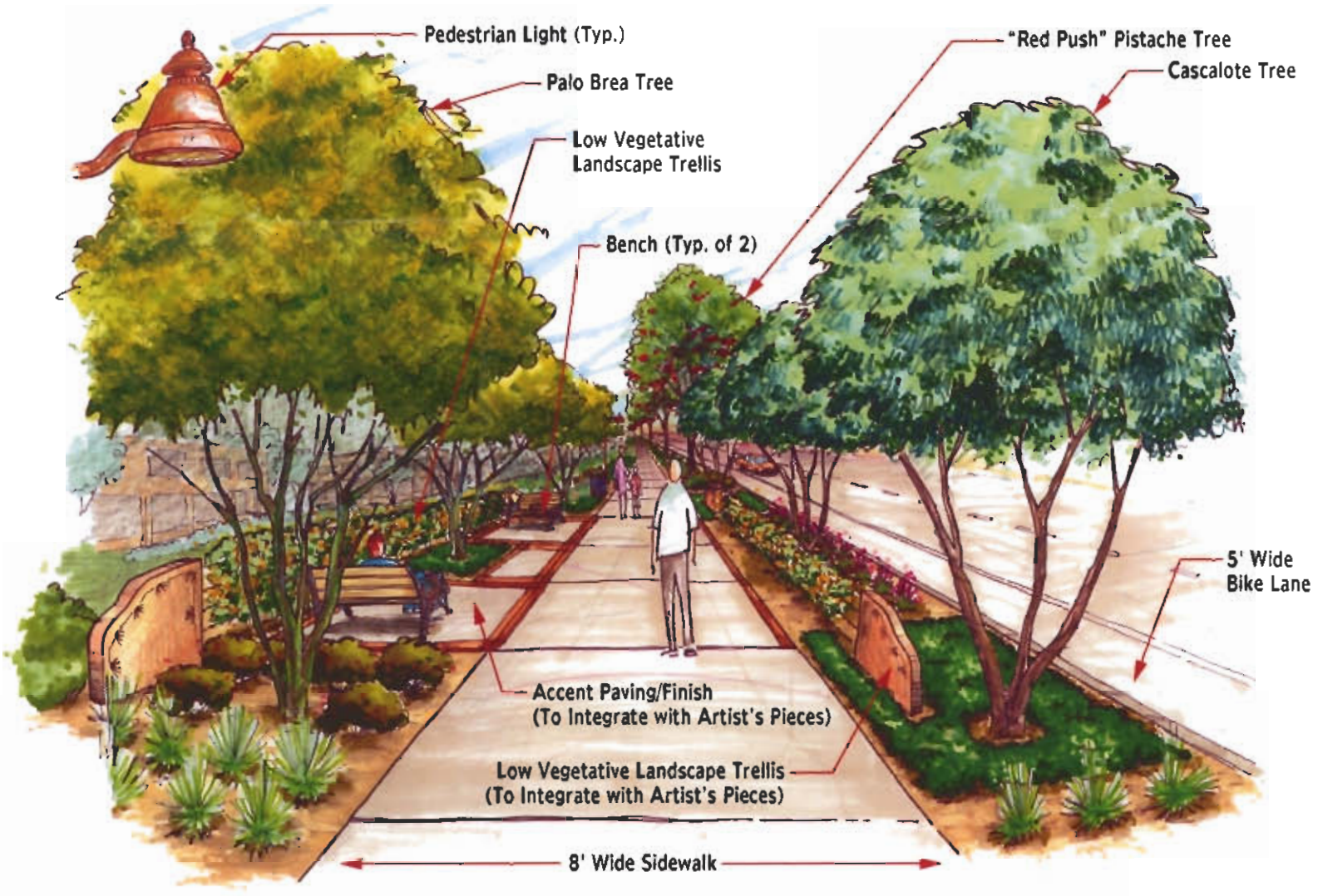
May 12, 2006

LOGAN SIMPSON DESIGN INC.

18-DR-2006
REV: 5/12/2006



Plan View



Perspective Sketch

CITY OF SCOTTSDALE

INDIAN SCHOOL ROAD (DRINKWATER BOULEVARD TO PIMA ROAD)

SEATING NODE ALTERNATIVE B

May 12, 2006

LOGAN SIMPSON DESIGN INC.

18-DR-2006
REV: 5/12/2006





Pistache "Red Push" (Large Canopy Tree)



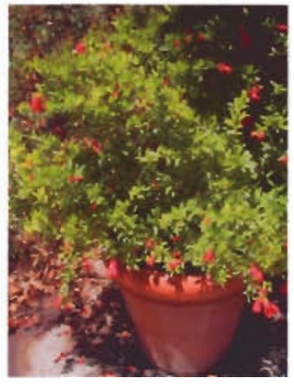
Sissoo (Large Canopy Tree)


Palo Brea (Large Accent Tree)



Cascalote (Small Accent Tree)






Pomegranate (Accent Shrub)

CITY OF SCOTTSDALE

INDIAN SCHOOL ROAD (DRINKWATER BOULEVARD TO PIMA ROAD)

PROPOSED LANDSCAPE PLANTS

May 12, 2006

LOGAN SIMPSON DESIGN INC.

18-DR-2006
REV: 5/12/2006

INDIAN SCHOOL ROAD (DRINKWATER BOULEVARD TO PIMA ROAD)

TYPICAL STREETSCAPE PERSPECTIVE

May 12, 2006

18-DR-2006
REV: 5/12/2006

LOGAN SIMPSON DESIGN INC.